

In the Drawings:

Replace the original drawings Figs. 1-4 with the attached replacement drawings, Figs. 1-4.

REMARKS

Applicant herewith submits formal replacement drawings and has amended claims 1-3 in a sincere effort to place the subject application in condition for allowance. Reconsideration is respectfully requested.

Declaration

Applicant submits herewith an executed Declaration by the inventor. The subject application was filed with an unexecuted Declaration. On September 22, 2005, the USPTO mailed a filing receipt and Notice of Acceptance of Application Under 35 USC 371. No notice of missing parts was mailed (an apparent oversight). Accordingly, Applicant submits herewith the executed Declaration.

Drawings

At page 2 of the Official Action, new corrected drawings were required. Applicant submits herewith replacement drawings, Figs. 1-4, in compliance with 37 CFR 1.121(d). The German text has been replaced with English text. Entry is respectfully requested.

Claim Rejections Under 35 USC § 112

At pages 2-3 of the Official Action, claims 1-7 were rejected under 35 USC § 112 as being indefinite. The examiner indicates that it is unclear whether the preamble recites claimed process steps or product limitations. It is submitted the claim 1 as amended is now definite. In particular, the preamble recites a product, upon which the method of the invention is performed. Specifically, the preamble defines a particular product, namely a receptacle having a stiff outer receptacle and a deformable inner bag. The product is defined both in terms of its structure and the method by which it is made. It is submitted that defining the product in this manner is not indefinite. Indeed, similar preambles were found

to be proper in Applicant's issued U.S. Patents Nos. 6,244,852 and 6,276,558. The claimed method is separated physically and grammatically from the preamble. The claimed method has been amended to recite specific method steps.

The Examiner has objected to the terms "uneven surface," "high oscillation frequency" and "dust-like particles" as being indefinite. Although, Applicant contends that these terms are readily understood by those skilled in the art and are not indefinite. Nevertheless, these terms have been removed or amended, and thus the issue is moot.

For the foregoing reasons, it is submitted that claims 1-7 are not indefinite.

Double Patenting

Claims 1 and 4 have been rejected on the grounds of nonstatutory obviousness-type double patenting over claim 5 of U.S. Patent No. 6,276,558 (Kneer '558). Claims 1 and 4 have been further rejected on the grounds of nonstatutory obviousness-type double patenting over claim 1 of U.S. Patent No. 6,244,852 (Kneer '852). In addition, claims 1-7 have been rejected on the grounds of nonstatutory obviousness-type double patenting over both claim 5 of Kneer '558 and claim 1 of Kneer '852 in view of secondary references, namely, U.S. Patent Nos. 6,865,813 (Pollak) or 4,955,888 (Slocum) or 5,69,257 (Arnegger). Applicant submits that the claims as amended distinguish patentably over Applicant's earlier Kneer '558 and Kneer '842 patents.

Before turning to the specific claim language, it is important to consider the general problem that is being addressed by the present application, as well as the prior Kneer '558 and Kneer '852 patents. In his prior patents, Applicant found solutions differing from the one of the present case. The receptacle or container at issue comprises a substantially stiff outer container and easily deformable inner bag made from different thermoplastic materials that are co-extruded side by side and are not joined to one another as they consist of different thermoplastic materials. Such a containers of this type are adapted to be filled with a liquid, e.g., for medical use, that is discharged with the help of an airless pump. Upon discharge of the contents of the container, pressure compensation does not take place as in

conventional containers by air entering into the inner bag. This is very important for specific liquid substances, such as medical products, because the contents might get contaminated if air enters into the inner bag.

Instead, pressure is compensated by the inner bag contracting. This, however, can only be accomplished if the stiff outer container comprises at least one wall opening through which air can enter into the space between the stiff outer container and the easily deformable inner bag.

The problem to be solved lies in the formation of a hole or several holes in the stiff outer container without the very thin and easily deformable inner bag being damaged in the process, for if the very thin inner bag is damaged, the container could of course not be used any more. When the at least one hole is formed, it must be borne in mind that the inner bag rests on the stiff outer layer. Thus, it is not a simple matter to form a hole in the outer container without damaging the immediately adjacent bag.

In Kneer '852, Applicant suggests cutting a notch in the wall of the stiff outer container without the cut or notch penetrating through the whole wall, leaving a residual wall section unimpaired. This residual wall section is then broken open in a second, subsequent step by application of a force. A further method disclosed in Kneer '852 is that the wall of the outer container is completely pierced and that, when the tool has completely pierced the wall, a medium such as air is blown against the wall of the inner bag, so that the inner bag recedes inwardly. Damage to the inner bag is avoided with this method. Both methods of the '852 patent require two steps.

In Kneer '558, Applicant discloses and claims a method in which a special cutting tool with an inclined cutting flank impinges at a flat angle on the stiff outer wall and a chip is cut out of the outer wall in a single cut, whereby the hole is formed. Because the cut is made at a flat angle relative to the wall of the outer container, which may be carried out with a straight forward movement of a knife according to Fig. 1 or with a circular movement according to Fig. 2, the easily deformable inner bag does also not get damaged as the inner

bag is pressed back inwards without getting damaged due to the knife impinging at a flat angle.

Applicant has now discovered that the desired opening can more desirably be formed by means of an oscillating tool which is reciprocated to remove material in particles with saw tool until the stiff outer container has been penetrated completely. The saw tool is oscillated in a direction transverse to the direction of the thickness of the wall. After having penetrated through the outer container, the oscillating tool impinges in this process on the easily deformable inner bag, **and it has surprisingly been found that the inner bag escapes inwards on account of its easy deformability and is not damaged by the oscillating saw tool**. The uneven or rough surface of the tool may here be configured in different ways, of which some are listed in the dependent claims. In principle any saw tool with rough surface could be used for abrading small or minute particles from the stiff outer container with an oscillating movement oriented in a direction transverse to the advance direction through the outer layer until a hole is finally formed in the outer container.

Turning now to the claims, claim 1 calls for forming at least one wall opening in the outer receptacle by oscillating a saw tool having a rough surface to remove particles of wall material, advancing the oscillating saw tool through the wall of the outer receptacle, and impinging the oscillating saw tool upon the inner bag which yields inwardly without being substantially damaged. The claim distinguishes over the Kneer '558 and '852 patents because neither discloses cutting a hole by oscillating a saw. Further, the Kneer patents teach away from directly impinging the tool on the inner bag causing it to yield inwardly as such was thought to risk damage to the inner bag. The Kneer '852 patent discloses blowing air to move the inner bag to avoid impinging the cutting tool on the bag. The Kneer '558 patent discloses that a knife or cutting tube will impinge on the bag, but only at a very flat angle, so that the bag is moved inwards without damage (see col. 2, line 65 to col. 3, line 9). Both of the cited Kneer patents use smooth surface knives not rough surface saw tools. Thus, claim 1 as amended distinguishes over the cited Kneer '552 and '852 patents.

The Pollak, Slocum and Arnegger references do not render claim 1 obvious. These references show only that oscillating saws are known. This is not disputed. It is submitted, however, that the art as whole fails to suggest using an oscillating saw to form an opening in a container on which rests a deformable bag that cannot be punctured or damaged. In Kneer '558 the knife performs a straight forward cut or a single cut in the form of a circular arc. The knife used for this is not usable for an oscillating removal of material as claimed. Likewise in Kneer '852, the outer container is only partly incised with a cut and then broken open by applying a force. Again, the knife is not suitable for oscillating movement.

Further, it is submitted that it would not have been obvious to one of ordinary skill in the art to substitute oscillating saws as shown in the Pollak, Slocum and Arnegger references for the knives disclosed in the Kneer patents because doing so was conventionally believed to be likely to cause damage to the inner bag. The claimed method is contrary to conventional wisdom, and thus is non-obvious.

Accordingly, it is submitted that claim 1 is clearly distinguishes over the claims of the Kneer patents and that the double patenting rejection has been traversed. Claim 4 depends from claim 1 and is allowable for the same reasons in addition to the limitations set forth in the dependent claims in combination.

Rejections Under 35 USC § 102

Claims 1 and 4 are rejected as anticipated by Kneer '558 and alternatively by U.S. Patent No. 6,276,558 (Nomoto et al). It is submitted that Kneer '558 does not anticipate claims 1 and 4 for the same reasons as addressed above, which remarks are incorporated herein by reference. Further, it is submitted that claims 1 and 4 are not anticipated by Nomoto et al.

In Nomoto et al a hole is punched with a tubulous blade 33 into the neck portion of a container. The tubulous blade being moved forwards along a guide 22, 21, 35 in straight fashion to be pierced into the outer container. This is of course does not disclose or

suggest oscillating movement because the punching operation takes place exclusively in a continuous forward movement. Further, the device in Nomoto et al is quite complicated, as shown in Fig. 2 of Nomoto et al, and includes a pressure member 25 which is pressed in the interior of the container neck at said place against the inner bag on which the hole is punched from the outside into the outer layer. Moreover, this device includes a stop (adjusting bolt 36, 38) with which the advance movement is restricted during punching of the hole such that the punching tool cannot penetrate into the inner bag. This is described in column 14, lines 1 to 21. This method has the drawback that whenever the thickness of the inner bag is smaller than a size t due to allowances occurring during production, the outer layer is not completely pierced, and whenever the inner bag has a thickness greater than t , the inner bag gets damaged. This is of course an entirely different method than the one suggested in the present patent application.

For these reasons claim 1 and 4 are not anticipated by the cited references.

Rejections Under 35 USC § 103

At pages 8-9 of the Official Action, claims 2, 3 and 5-7 were rejected under 35 USC § 103 as being unpatentable over Kneer '558 in view of the Pollak, Slocum or Arnegger references. These claims were also rejected under 35 USC § 103 as being unpatentable over Nomoto et al in view of the Pollak, Slocum or Arnegger references. The non-obviousness of the claims over Kneer '558 in view of the Pollak, Slocum or Arnegger is addressed above, and incorporated herein by reference.

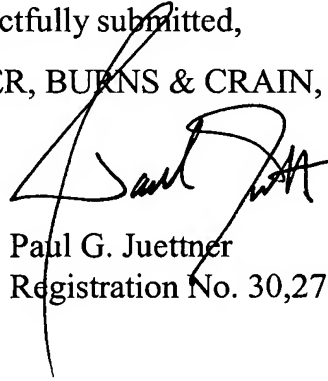
It is submitted that the Nomoto et al reference cannot be combined in a reasonable way with the oscillating tools disclosed in the Pollak, Slocum and Arnegger references. The punching tool of Nomoto et al performs a continuous advance movement while the hole is being punched, and this cannot be combined with a movement oscillating in a direction transverse to the advance direction, as is the case with the subject matter of the application.

It comes as a complete surprise that a hole can be formed in the outer container with the method claimed in the instant patent application without any damage to the very thin inner bag resting thereon (after the outer container has been penetrated entirely). This is also nowhere suggested in the prior art. Accordingly, it is submitted that claim 1 is allowable. Claims 2-10 depend from claim 1 and are allowable for the same reasons in addition to the limitations set forth in the dependent claims in combination.

For the reasons of the claim amendments and foregoing remarks, it is submitted that claims 1-10 are in condition for allowance. An early Notice of Allowance is earnestly solicited.

Respectfully submitted,
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